03CC





OIPE

RAW SEQUENCE LISTING DATE: 02/15/2002 PATENT APPLICATION: US/10/057,813 TIME: 14:35:09

Input Set : A:\LJ5144.txt

Output Set: N:\CRF3\02152002\J057813.raw

## ENTERED

```
4 <110> APPLICANT: Reed, John C.
              Okada, Kazuya
      7 <120> TITLE OF INVENTION: Survivin-Binding Proteins, Encoding
              Nucleic Acids, and Methods of Use
     11 <130> FILE REFERENCE: P-LJ 5144
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/057,813
C--> 13 <141> CURRENT FILING DATE: 2002-01-24
     13 <150> PRIOR APPLICATION NUMBER: US 09/770,219
     14 <151> PRIOR FILING DATE: 2001-01-25
     16 <160> NUMBER OF SEQ ID NOS: 14
     18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     20 <210> SEQ ID NO: 1
     21 <211> LENGTH: 645
    22 <212> TYPE: DNA
    23 <213> ORGANISM: Homo sapiens
    25 <220> FEATURE:
    26 <221> NAME/KEY: CDS
    27 <222> LOCATION: (145)...(642)
    29 <400> SEQUENCE: 1
    30 ttgggtaccg ggcccccct cgaggtcgac ggtatcgata agcttgatat cgaattcggc 60
    31 acgageegeg egecatettg geteeggate gtgegtgagg aggettegtg ggeagegaga 120
    32 gtcacagaca agacagcaag cagg atg gag cac tac cgg aaa gct ggc tct
    33
                                   Met Glu His Tyr Arg Lys Ala Gly Ser
    34
    36 gta gag ctc cca gcg cct tcc cca atg ccc cag cta cct cct gat acc
                                                                           219
    37 Val Glu Leu Pro Ala Pro Ser Pro Met Pro Gln Leu Pro Pro Asp Thr
                            15
                                                 20
    40 ctt gag atg cgg gtc cga gat ggc agc aaa att cgc aac ctg ctg ggg
                                                                           267
    41 Leu Glu Met Arg Val Arg Asp Gly Ser Lys Ile Arg Asn Leu Leu Gly
                        30
                                             35
    44 ttg gct ctg ggt cgg ttg gag ggc ggc agt gct cgg cat gta gtg ttc
                                                                           315
    45 Leu Ala Leu Gly Arg Leu Glu Gly Gly Ser Ala Arg His Val Val Phe
                                         50
                                                             55
    48 tca ggt tct ggc agg gct gca gga aag gct gtc agc tgc gct gag att
                                                                           363
    49 Ser Gly Ser Gly Arg Ala Ala Gly Lys Ala Val Ser Cys Ala Glu Ile
    50
                60
                                     65
    52 gtc aag cgg cgg gtc cca ggc ctg cac cag ctc acc aag cta cgt ttc
                                                                           411
    53 Val Lys Arg Arg Val Pro Gly Leu His Gln Leu Thr Lys Leu Arg Phe
                                80
    56 ctt cag act gag gac agc tgg gtc cca gcc tca cct gac aca ggg cta
                                                                           459
    57 Leu Gln Thr Glu Asp Ser Trp Val Pro Ala Ser Pro Asp Thr
    58
                            95
                                                100
    60 gac ccc ctc aca gtg cgc cgc cat gtg cct gca gtg tgg gtg ctg ctc
                                                                           507
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/057,813

DATE: 02/15/2002
TIME: 14:35:09

Input Set : A:\LJ5144.txt

Output Set: N:\CRF3\02152002\J057813.raw

```
61 Asp Pro Leu Thr Val Arg Arg His Val Pro Ala Val Trp Val Leu Leu
                   110
                                        115
 64 agc egg gae eec etg gae eec aat gag tgt ggt tac eaa eec eea gga
                                                                      555
 65 Ser Arg Asp Pro Leu Asp Pro Asn Glu Cys Gly Tyr Gln Pro Pro Gly
               125
                                   130
 68 gca ccc cct ggc ctg ggt tcc atg ccc agc tcc agc tgt ggc cct cgt
                                                                      603
 69 Ala Pro Pro Gly Leu Gly Ser Met Pro Ser Ser Ser Cys Gly Pro Arg
                               145
                                                    150
72 tcc cga aga agg ctc gag aca ccc gat cgt gaa gac ttg tga
                                                                      645
73 Ser Arg Arg Leu Glu Thr Pro Asp Arg Glu Asp Leu
74
       155
                           160
77 <210> SEQ ID NO: 2
78 <211> LENGTH: 166
79 <212> TYPE: PRT
80 <213> ORGANISM: Homo sapiens
82 <400> SEQUENCE: 2
83 Met Glu His Tyr Arg Lys Ala Gly Ser Val Glu Leu Pro Ala Pro Ser
                   - 5
85 Pro Met Pro Gln Leu Pro Pro Asp Thr Leu Glu Met Arg Val Arg Asp
               2.0
                                   25
87 Gly Ser Lys Ile Arg Asn Leu Leu Gly Leu Ala Leu Gly Arg Leu Glu
         35
                               40
89 Gly Gly Ser Ala Arg His Val Val Phe Ser Gly Ser Gly Arg Ala Ala
                           5.5
91 Gly Lys Ala Val Ser Cys Ala Glu Ile Val Lys Arg Arg Val Pro Gly
92 65
                       70
                                           75
93 Leu His Gln Leu Thr Lys Leu Arg Phe Leu Gln Thr Glu Asp Ser Trp
                                       90
95 Val Pro Ala Ser Pro Asp Thr Gly Leu Asp Pro Leu Thr Val Arg Arg
               100
                                   105
97 His Val Pro Ala Val Trp Val Leu Leu Ser Arg Asp Pro Leu Asp Pro
                               120
                                                   125
99 Asn Glu Cys Gly Tyr Gln Pro Pro Gly Ala Pro Pro Gly Leu Gly Ser
       130
                            135
                                                140
101 Met Pro Ser Ser Ser Cys Gly Pro Arg Ser Arg Arg Leu Glu Thr
                        150
103 Pro Asp Arg Glu Asp Leu
107 <210> SEQ ID NO: 3
108 <211> LENGTH: 41
109 <212> TYPE: PRT
110 <213> ORGANISM: Homo sapiens
112 <400> SEQUENCE: 3
113 Val Pro Lys Thr His Leu Met Ser Glu Ser Glu Trp Arg Asn Leu Gly
                    5
                                        1.0
115 Val Gln Gln Ser Gln Gly Trp Val His Tyr Met Ile His Glu Pro Glu
                                    25
117 Pro His Ile Leu Leu Phe Arg Arg Pro
           35
```

DATE: 02/15/2002

TIME: 14:35:09

## Input Set : A:\LJ5144.txt Output Set: N:\CRF3\02152002\J057813.raw 121 <210> SEQ ID NO: 4 122 <211> LENGTH: 41 123 <212> TYPE: PRT 124 <213> ORGANISM: Homo sapiens 126 <400> SEQUENCE: 4 127 Val Pro Lys Thr His Leu Met Ser Glu Glu Glu Trp Arg Arg Leu Gly 128 1 5 10 129 Val Gln Gln Ser Leu Gly Trp Val His Tyr Met Ile His Glu Pro Glu 25 131 Pro His Ile Leu Leu Phe Arg Arg Pro 132 35 135 <210> SEQ ID NO: 5 136 <211> LENGTH: 41 137 <212> TYPE: PRT 138 <213> ORGANISM: Drosophila melanogaster 140 <400> SEQUENCE: 5 141 Val Pro Lys Thr His Leu Met Thr Glu Ala Glu Trp Arg Ser Ile Gly 5 10 143 Val Gln Gln Ser Arg Gly Trp Ile His Tyr Met Ile His Lys Pro Glu 20 25 145 Pro His Ile Leu Leu Phe Arg Arg Pro 146 35 40 149 <210> SEQ ID NO: 6 150 <211> LENGTH: 41 151 <212> TYPE: PRT 152 <213> ORGANISM: Saccharomyces cerevisiae 154 <400> SEQUENCE: 6 155 Val Gly Thr Leu Arg Ile Leu Thr Glu Asp Glu Trp Arg Gly Leu Gly 5 10 157 Ile Thr Gln Ser Leu Gly Trp Glu His Tyr Glu Cys His Ala Pro Glu 2.0 25 159 Pro His Ile Leu Leu Phe Lys Arg Pro 35 163 <210> SEQ ID NO: 7 164 <211> LENGTH: 25 165 <212> TYPE: DNA 166 <213> ORGANISM: Artificial Sequence 168 <220> FEATURE: 169 <223> OTHER INFORMATION: primer 171 <400> SEQUENCE: 7 172 cgaattcatg ggtgccccga cgttg 25 174 <210> SEQ ID NO: 8 175 <211> LENGTH: 19 176 <212> TYPE: DNA 177 <213> ORGANISM: Artificial Sequence 179 <220> FEATURE: 180 <223> OTHER INFORMATION: primer 182 <400> SEQUENCE: 8 183 atccgctccg gttcgcagg 19

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/057,813

## RAW SEQUENCE LISTING DATE: 02/15/2002 PATENT APPLICATION: US/10/057,813 TIME: 14:35:09

Input Set : A:\LJ5144.txt

Output Set: N:\CRF3\02152002\J057813.raw

```
185 <210> SEO ID NO: 9
 186 <211> LENGTH: 19
 187 <212> TYPE: DNA
 188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: primer
193 <400> SEQUENCE: 9
194 cctgcgaacc ggagcggat
                                                                        19
196 <210> SEQ ID NO: 10
197 <211> LENGTH: 33
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: primer
204 <400> SEQUENCE: 10
205 gagetegagt taatecatgg cagecagetg etc
                                                                        33
207 <210> SEQ ID NO: 11
208 <211> LENGTH: 27
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: primer
215 <400> SEQUENCE: 11
216 agaattcatg gagcactacc ggaaagc
                                                                        27
218 <210> SEQ ID NO: 12
219 <211> LENGTH: 36
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: primer
226 <400> SEQUENCE: 12
227 cagctcgagt tacaagtctt cacgatcggg tgtttc
                                                                        36
229 <210> SEQ ID NO: 13
230 <211> LENGTH: 492
231 <212> TYPE: DNA
232 <213> ORGANISM: Homo sapiens
234 <220> FEATURE:
235 <221> NAME/KEY: CDS
236 <222> LOCATION: (1)...(489)
238 <400> SEQUENCE: 13
239 atg gag cae tae egg aaa get gge tet gta gag ete eea geg eet tee
240 Met Glu His Tyr Arg Lys Ala Gly Ser Val Glu Leu Pro Ala Pro Ser
241 1
                     5
                                          10
243 cca atg ccc cag cta cct cct gat acc ctt gag atg cgg gtc cga gat
244 Pro Met Pro Gln Leu Pro Pro Asp Thr Leu Glu Met Arg Val Arg Asp
                                      25
247 ggc agc aaa att cgc aac ctg ctg ggg ttg gct ctg ggt cgg ttg gag
248 Gly Ser Lys Ile Arg Asn Leu Leu Gly Leu Ala Leu Gly Arg Leu Glu
249
             35
                                 40
                                                      45
```

RAW SEQUENCE LISTING DATE: 02/15/2002 PATENT APPLICATION: US/10/057,813 TIME: 14:35:09

Input Set : A:\LJ5144.txt

. 1

Output Set: N:\CRF3\02152002\J057813.raw

```
251 ggc ggc agt gct egg cat gta gtg ttc tca ggt tct ggc agg gct gca
                                                                        192
252 Gly Gly Ser Ala Arg His Val Val Phe Ser Gly Ser Gly Arg Ala Ala
253
         50
                              55
255 gga aag gct gtc agc tgc gct gag att gtc aag cgg cgg gtc cca ggc
                                                                        240
256 Gly Lys Ala Val Ser Cys Ala Glu Ile Val Lys Arg Arg Val Pro Gly
257 65
                         70
                                              75
259 ctg cac cag ctc acc aag cta cgt ttc ctt cag act gag gac agc tgg
                                                                        288
260 Leu His Gln Leu Thr Lys Leu Arg Phe Leu Gln Thr Glu Asp Ser Trp
                     85
                                          90
263 gtc cca gcc tca cct gac aca ggg cta gac ccc ctc aca gtg cgc cgc
                                                                        336
264 Val Pro Ala Ser Pro Asp Thr Gly Leu Asp Pro Leu Thr Val Arg Arg
                100
                                     105
267 cat gtg cet gea gtg tgg gtg etg ete age egg gae eee etg gae eee
                                                                        384
268 His Val Pro Ala Val Trp Val Leu Leu Ser Arg Asp Pro Leu Asp Pro
            115
                                 120
                                                     125
271 aat gag tgt ggt tac caa ccc cca gga gca ccc cct ggc ctg ggt tcc
                                                                        432
272 Asn Glu Cys Gly Tyr Gln Pro Pro Gly Ala Pro Pro Gly Leu Gly Ser
                            135
                                                 1.40
275 atg ccc agc tcc agc tgt ggc cct cgt tcc cga aga agg gct cga gac
                                                                        480
276 Met Pro Ser Ser Ser Cys Gly Pro Arg Ser Arg Arg Arg Ala Arg Asp
277 145
                        150
279 acc cga tcg tga
                                                                        492
280 Thr Arg Ser
284 <210> SEQ ID NO: 14
285 <211> LENGTH: 163
286 <212> TYPE: PRT
287 <213> ORGANISM: Homo sapiens
289 <400> SEQUENCE: 14
290 Met Glu His Tyr Arg Lys Ala Gly Ser Val Glu Leu Pro Ala Pro Ser
                     5
                                         10
292 Pro Met Pro Gln Leu Pro Pro Asp Thr Leu Glu Met Arg Val Arg Asp
                2.0
                                     25
294 Gly Ser Lys Ile Arg Asn Leu Leu Gly Leu Ala Leu Gly Arg Leu Glu
                                 40
296 Gly Gly Ser Ala Arg His Val Val Phe Ser Gly Ser Gly Arg Ala Ala
                            55
298 Gly Lys Ala Val Ser Cys Ala Glu Ile Val Lys Arg Arg Val Pro Gly
299 65
                        70
                                             75
300 Leu His Gln Leu Thr Lys Leu Arg Phe Leu Gln Thr Glu Asp Ser Trp
301
                    85
                                         90
302 Val Pro Ala Ser Pro Asp Thr Gly Leu Asp Pro Leu Thr Val Arg Arg
                100
                                     105
304 His Val Pro Ala Val Trp Val Leu Leu Ser Arg Asp Pro Leu Asp Pro
            115
                                120
306 Asn Glu Cys Gly Tyr Gln Pro Pro Gly Ala Pro Pro Gly Leu Gly Ser
                            135
                                                 140
308 Met Pro Ser Ser Ser Cys Gly Pro Arg Ser Arg Arg Arg Ala Arg Asp
309 145
                        150
                                             155
                                                                 160
310 Thr Arg Ser
```

Page 6 of 7

VERIFICATION SUMMARYDATE: 02/15/2002PATENT APPLICATION:US/10/057,813TIME: 14:35:10

Input Set : A:\LJ5144.txt
Output Set: N:\CRF3\02152002\J057813.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date